

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers,
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Blast furnace and basic steel products (SIC 3310)			
Scientific and technical personnel.....	7,910	4.1	(nc)
Managers of scientific and technical personnel	730	0.4	(nc)
Computer and information systems managers	330	0.2	10
Engineering managers	400	0.2	6
Scientists	1,320	0.7	(nc)
Computer scientists	920	0.5	(nc)
Computer software, applications	160	0.1	16
Computer software, systems	120	0.1	24
Computer systems analysts	430	0.2	20
Network and computer systems administrators	160	0.1	14
Network systems/data communications analysts	50	<	19
Mathematical scientists	170	0.1	(nc)
Operations and systems researchers and analysts	170	0.1	15
Physical scientists	230	0.1	(nc)
Chemists	180	0.1	13
Materials scientists	50	<	14
Engineers	3,420	1.8	(nc)
Civil	40	<	16
Electrical/electronics	270	0.1	(nc)
Electrical	240	0.1	8
Electronics	30	<	13
Industrial	890	0.5	8
Mechanical	780	0.4	11
Sales	90	0.1	17
Other engineers	1,350	0.7	(nc)
Environmental	150	0.1	6
Metallurgical/metallurgists	1,020	0.5	13
Safety	180	0.1	11
Technicians	2,440	1.3	(nc)
Computer, numerical tool, and process control programmers	320	0.2	(nc)
Computer programmers	320	0.2	11
Drafters	380	0.2	(nc)
Architectural and civil drafters	50	<	2
Electrical and electronics drafters	100	0.1	36
Mechanical drafters	230	0.1	11
Engineering technicians	1,120	0.6	(nc)
Electrical/electronics engineering technicians	400	0.2	12
Electro-mechanical technicians	140	0.1	13
Environmental engineering technicians	50	<	19
Industrial engineering technicians	150	0.1	15
Mechanical engineering technicians	380	0.2	17
Physical and life science technicians	620	0.3	(nc)
Chemical technicians, except health	570	0.3	12
Environmental science and protection technicians, including health	50	<	17

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Iron and steel foundries (SIC 3320)			
Scientific and technical personnel.....	3,570	3.3	(nc)
Managers of scientific and technical personnel	460	0.4	(nc)
Computer and information systems managers	150	0.1	9
Engineering managers	310	0.3	4
Scientists	240	0.2	(nc)
Computer scientists	210	0.2	(nc)
Computer software, applications	70	0.1	22
Computer systems analysts	60	0.1	13
Network and computer systems administrators	80	0.1	23
Physical scientists	30	<	(nc)
Materials scientists	30	<	14
Engineers	2,020	1.9	(nc)
Electrical/electronics	50	0.1	(nc)
Electrical	50	0.1	13
Industrial	820	0.8	5
Mechanical	350	0.3	7
Sales	150	0.1	16
Other engineers	650	0.6	(nc)
Environmental	80	0.1	10
Metallurgical/metallurgists	430	0.4	8
Safety	140	0.1	6
Technicians	850	0.8	(nc)
Computer, numerical tool, and process control programmers	180	0.2	(nc)
Computer programmers	100	0.1	12
Numerical tool and process control programmers	80	0.1	20
Drafters	160	0.2	(nc)
Architectural and civil drafters	40	<	14
Mechanical drafters	120	0.1	11
Engineering technicians	410	0.4	(nc)
Electrical/electronics engineering technicians	80	0.1	14
Industrial engineering technicians	220	0.2	11
Mechanical engineering technicians	110	0.1	15
Physical and life science technicians	100	0.1	(nc)
Chemical technicians, except health	100	0.1	23
Primary nonferrous metals (SIC 3330)			
Scientific and technical personnel.....	2,010	6.9	(nc)
Managers of scientific and technical personnel	130	0.4	(nc)
Computer and information systems managers	30	0.1	16
Engineering managers	100	0.3	11

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Primary nonferrous metals (SIC 3330) -- continued:			
Scientists	370	1.3	(nc)
Computer scientists	110	0.4	(nc)
Computer systems analysts	70	0.2	14
Network and computer systems administrators	40	0.1	14
Physical scientists	260	0.9	(nc)
Chemists	260	0.9	15
Engineers	740	2.6	(nc)
Computer	30	0.1	26
Electrical/electronics	90	0.3	(nc)
Electrical	90	0.3	21
Industrial	110	0.4	15
Mechanical	130	0.5	14
Sales	50	0.2	22
Other engineers	330	1.1	(nc)
Chemical	110	0.4	18
Environmental	60	0.2	16
Metallurgical/metallurgists	120	0.4	11
Safety	40	0.1	12
Technicians	770	2.6	(nc)
Computer, numerical tool, and process control programmers	50	0.2	(nc)
Computer programmers	50	0.2	10
Drafters	70	0.2	(nc)
Mechanical drafters	70	0.2	19
Engineering technicians	420	1.4	(nc)
Electrical/electronics engineering technicians	70	0.2	27
Industrial engineering technicians	70	0.2	14
Mechanical engineering technicians	280	1.0	30
Physical and life science technicians	230	0.8	(nc)
Chemical technicians, except health	230	0.8	16
Secondary nonferrous metals (SIC 3340)			
Scientific and technical personnel.....	350	2.4	(nc)
Scientists	100	0.7	(nc)
Physical scientists	100	0.7	(nc)
Chemists	100	0.7	13
Engineers	100	0.7	(nc)
Industrial	40	0.3	15
Other engineers	60	0.4	(nc)
Metallurgical/metallurgists	60	0.4	9
Technicians	150	1.0	(nc)
Physical and life science technicians	150	1.0	(nc)
Chemical technicians, except health	100	0.7	7
Environmental science and protection technicians, including health	50	0.3	27

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Nonferrous rolling and drawing (SIC 3350)			
Scientific and technical personnel.....	9,070	6.0	(nc)
Managers of scientific and technical personnel	1,120	0.7	(nc)
Computer and information systems managers	390	0.3	5
Engineering managers	670	0.4	4
Natural sciences managers	60	<	17
Scientists	1,220	0.8	(nc)
Computer scientists	860	0.6	(nc)
Computer software, applications	140	0.1	12
Computer systems analysts	430	0.3	7
Network and computer systems administrators	230	0.2	6
Network systems/data communications analysts	60	<	8
Physical scientists	360	0.2	(nc)
Chemists	190	0.1	12
Materials scientists	170	0.1	13
Engineers	3,750	2.5	(nc)
Electrical/electronics	730	0.5	(nc)
Electrical	450	0.3	11
Electronics	280	0.2	12
Industrial	1,170	0.8	5
Mechanical	860	0.6	7
Sales	180	0.1	10
Other engineers	810	0.5	(nc)
Chemical	60	<	9
Environmental	110	0.1	6
Metallurgical/metallurgists	500	0.3	8
Safety	140	0.1	6
Technicians	2,980	2.0	(nc)
Computer, numerical tool, and process control programmers	420	0.3	(nc)
Computer programmers	310	0.2	10
Numerical tool and process control programmers	110	0.1	21
Drafters	420	0.3	(nc)
Architectural and civil drafters	50	<	18
Electrical and electronics drafters	40	<	11
Mechanical drafters	330	0.2	12
Engineering technicians	1,440	1.0	(nc)
Electronical/electronics engineering technicians	520	0.3	8
Electro-mechanical technicians	120	0.1	19
Environmental engineering technicians	50	<	17
Industrial engineering technicians	480	0.3	15
Mechanical engineering technicians	270	0.2	14
Physical and life science technicians	700	0.5	(nc)
Chemical technicians, except health	650	0.4	20
Environmental science and protection technicians, including health	50	<	20

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Nonferrous foundries (castings) (SIC 3360)			
Scientific and technical personnel.....	2,680	3.2	(nc)
Managers of scientific and technical personnel	360	0.4	(nc)
Computer and information systems managers	80	0.1	8
Engineering managers	280	0.3	7
Scientists	70	0.1	(nc)
Computer scientists	70	0.1	(nc)
Network and computer systems administrators	70	0.1	15
Engineers	1,390	1.7	(nc)
Electrical/electronics	40	0.1	(nc)
Electrical	40	0.1	15
Industrial	500	0.6	8
Mechanical	540	0.7	6
Sales	90	0.1	19
Other engineers	220	0.3	(nc)
Metallurgical/metallurgists	180	0.2	12
Safety	40	0.1	9
Technicians	860	1.0	(nc)
Computer, numerical tool, and process control programmers	300	0.4	(nc)
Computer programmers	60	0.1	16
Numerical tool and process control programmers	240	0.3	16
Drafters	220	0.3	(nc)
Mechanical drafters	220	0.3	17
Engineering technicians	340	0.4	(nc)
Industrial engineering technicians	260	0.3	8
Mechanical engineering technicians	80	0.1	15
Miscellaneous primary metal products (SIC 3390)			
Scientific and technical personnel.....	880	3.5	(nc)
Managers of scientific and technical personnel	150	0.6	(nc)
Computer and information systems managers	30	0.1	16
Engineering managers	120	0.5	22
Scientists	50	0.2	(nc)
Physical scientists	50	0.2	(nc)
Chemists	50	0.2	20
Engineers	390	1.5	(nc)
Industrial	120	0.5	9
Mechanical	80	0.3	11
Sales	40	0.2	21
Other engineers	150	0.6	(nc)
Metallurgical/metallurgists	150	0.6	12

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Miscellaneous primary metal products (SIC 3390) -- continued:			
Technicians	290	1.1	(nc)
Engineering technicians	160	0.6	(nc)
Electro-mechanical technicians	40	0.2	25
Industrial engineering technicians	120	0.5	21
Physical and life science technicians	130	0.5	(nc)
Chemical technicians, except health	130	0.5	18
Metal cans and shipping containers (SIC 3410)			
Scientific and technical personnel.....	720	2.2	(nc)
Managers of scientific and technical personnel	170	0.5	(nc)
Engineering managers	170	0.5	21
Scientists	30	0.1	(nc)
Physical scientists	30	0.1	(nc)
Materials scientists	30	0.1	31
Engineers	370	1.1	(nc)
Electrical/electronics	30	0.1	(nc)
Electrical	30	0.1	21
Industrial	120	0.4	16
Mechanical	180	0.6	29
Other engineers	40	0.1	(nc)
Environmental	40	0.1	20
Technicians	150	0.5	(nc)
Engineering technicians	150	0.5	(nc)
Electrical/electronics engineering technicians	100	0.3	13
Industrial engineering technicians	50	0.2	12
Cutlery, hand tools, and hardware (SIC 3420)			
Scientific and technical personnel.....	4,400	4.2	(nc)
Managers of scientific and technical personnel	690	0.7	(nc)
Computer and information systems managers	230	0.2	9
Engineering managers	460	0.4	7
Scientists	410	0.4	(nc)
Computer scientists	380	0.4	(nc)
Computer software, applications	90	0.1	15
Computer systems analysts	120	0.1	9
Network and computer systems administrators	130	0.1	7
Network systems/data communications analysts	40	<	12
Social scientists	30	<	(nc)
Market research analysts	30	<	14

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Cutlery, hand tools, and hardware (SIC 3420) -- continued:			
Engineers	1,950	1.9	(nc)
Electrical/electronics	80	0.1	(nc)
Electrical	40	<	16
Electronics	40	<	24
Industrial	740	0.7	12
Mechanical	810	0.8	4
Sales	80	0.1	19
Other engineers	240	0.2	(nc)
Environmental	30	<	10
Metallurgical/metallurgists	160	0.2	18
Safety	50	0.1	10
Technicians	1,350	1.3	(nc)
Computer, numerical tool, and process control programmers	400	0.4	(nc)
Computer programmers	200	0.2	17
Numerical tool and process control programmers	200	0.2	4
Drafters	410	0.4	(nc)
Mechanical drafters	410	0.4	7
Engineering technicians	540	0.5	(nc)
Electrical/electronics engineering technicians	80	0.1	15
Electro-mechanical technicians	50	0.1	36
Industrial engineering technicians	150	0.1	9
Mechanical engineering technicians	260	0.3	7
Plumbing and heating, except electric (SIC 3430)			
Scientific and technical personnel.....	2,540	4.5	(nc)
Managers of scientific and technical personnel	370	0.7	(nc)
Computer and information systems managers	110	0.2	7
Engineering managers	260	0.5	5
Scientists	190	0.3	(nc)
Computer scientists	140	0.2	(nc)
Computer systems analysts	70	0.1	4
Network and computer systems administrators	70	0.1	8
Social scientists	50	0.1	(nc)
Market research analysts	50	0.1	10
Engineers	1,000	1.8	(nc)
Electrical/electronics	50	0.1	(nc)
Electrical	50	0.1	8
Industrial	440	0.8	12
Mechanical	400	0.7	5
Sales	60	0.1	12
Other engineers	50	0.1	(nc)
Metallurgical/metallurgists	50	0.1	7

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Plumbing and heating, except electric (SIC 3430) -- continued:			
Technicians	980	1.7	(nc)
Computer, numerical tool, and process control programmers	130	0.2	(nc)
Computer programmers	70	0.1	7
Numerical tool and process control programmers	60	0.1	11
Drafters	330	0.6	(nc)
Electrical and electronics drafters	50	0.1	15
Mechanical drafters	280	0.5	6
Engineering technicians	520	0.9	(nc)
Electrical/electronics engineering technicians	70	0.1	17
Electro-mechanical technicians	100	0.2	3
Environmental engineering technicians	40	0.1	24
Industrial engineering technicians	150	0.3	4
Mechanical engineering technicians	160	0.3	11
Fabricated structural metal products (SIC 3440)			
Scientific and technical personnel.....	23,180	4.9	(nc)
Managers of scientific and technical personnel	2,780	0.6	(nc)
Computer and information systems managers	670	0.1	5
Engineering managers	2,110	0.5	6
Scientists	1,290	0.3	(nc)
Computer scientists	1,100	0.2	(nc)
Computer software, applications	270	0.1	13
Computer software, systems	40	<	32
Computer systems analysts	290	0.1	10
Network and computer systems administrators	380	0.1	16
Network systems/data communications analysts	120	<	20
Social scientists	190	<	(nc)
Market research analysts	190	<	18
Engineers	7,540	1.6	(nc)
Civil	900	0.2	11
Computer	40	<	49
Electrical/electronics	260	0.1	(nc)
Electrical	260	0.1	18
Industrial	2,100	0.4	6
Mechanical	2,760	0.6	4
Sales	650	0.1	7
Other engineers	830	0.2	(nc)
Chemical	80	<	16
Environmental	40	<	8
Metallurgical/metallurgists	510	0.1	14
Safety	200	<	7

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Fabricated structural metal products (SIC 3440) -- continued:			
Technicians	11,570	2.5	(nc)
Computer, numerical tool, and process control programmers	1,410	0.3	(nc)
Computer programmers	680	0.1	13
Numerical tool and process control programmers	730	0.2	10
Drafters	8,060	1.7	(nc)
Architectural and civil drafters	3,590	0.8	9
Electrical and electronics drafters	270	0.1	18
Mechanical drafters	4,200	0.9	5
Engineering technicians	2,010	0.4	(nc)
Civil engineering technicians	70	<	25
Electrical/electronics engineering technicians	180	<	10
Electro-mechanical technicians	240	0.1	19
Environmental engineering technicians	30	<	22
Industrial engineering technicians	1,080	0.2	12
Mechanical engineering technicians	410	0.1	9
Physical and life science technicians	30	<	(nc)
Environmental science and protection technicians, including health	30	<	11
Surveying, cartographic, photogrammetric, and mapping technicians	60	<	(nc)
Surveying and mapping technicians	60	<	40
Screw machine products, bolts, etc. (SIC 3450)			
Scientific and technical personnel.....	2,920	3.2	(nc)
Managers of scientific and technical personnel	450	0.5	(nc)
Computer and information systems managers	140	0.2	18
Engineering managers	310	0.3	8
Scientists	160	0.2	(nc)
Computer scientists	160	0.2	(nc)
Computer systems analysts	80	0.1	10
Network and computer systems administrators	80	0.1	8
Engineers	1,380	1.5	(nc)
Industrial	530	0.6	7
Mechanical	600	0.7	5
Sales	100	0.1	9
Other engineers	150	0.2	(nc)
Metallurgical/metallurgists	150	0.2	14
Technicians	930	1.0	(nc)
Computer, numerical tool, and process control programmers	410	0.5	(nc)
Computer programmers	90	0.1	13
Numerical tool and process control programmers	320	0.4	13
Drafters	200	0.2	(nc)
Mechanical drafters	200	0.2	9
Engineering technicians	320	0.3	(nc)
Electrical/electronics engineering technicians	50	0.1	29
Industrial engineering technicians	120	0.1	18
Mechanical engineering technicians	150	0.2	11

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Metal forgings and stampings (SIC 3460)			
Scientific and technical personnel.....	9,080	4.2	(nc)
Managers of scientific and technical personnel	1,270	0.6	(nc)
Computer and information systems managers	340	0.2	6
Engineering managers	930	0.4	7
Scientists	470	0.2	(nc)
Computer scientists	470	0.2	(nc)
Computer software, applications	80	<	10
Computer systems analysts	170	0.1	10
Network and computer systems administrators	180	0.1	7
Network systems/data communications analysts	40	<	15
Engineers	4,690	2.2	(nc)
Computer	90	<	48
Electrical/electronics	230	0.1	(nc)
Electrical	190	0.1	29
Electronics	40	<	20
Industrial	2,030	0.9	10
Mechanical	1,680	0.8	7
Sales	270	0.1	10
Other engineers	390	0.2	(nc)
Environmental	40	<	25
Metallurgical/metallurgists	240	0.1	6
Safety	110	0.1	9
Technicians	2,650	1.2	(nc)
Computer, numerical tool, and process control programmers	680	0.3	(nc)
Computer programmers	250	0.1	7
Numerical tool and process control programmers	430	0.2	6
Drafters	940	0.4	(nc)
Electrical and electronics drafters	40	<	20
Mechanical drafters	900	0.4	8
Engineering technicians	1,030	0.5	(nc)
Electrical/electronics engineering technicians	120	0.1	12
Electro-mechanical technicians	50	<	18
Industrial engineering technicians	480	0.2	18
Mechanical engineering technicians	380	0.2	17
Metal services, n.e.c. (SIC 3470)			
Scientific and technical personnel.....	2,570	2.0	(nc)
Managers of scientific and technical personnel	280	0.2	(nc)
Computer and information systems managers	100	0.1	8
Engineering managers	180	0.1	8

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Metal services, n.e.c. (SIC 3470) -- continued:			
Scientists	310	0.2	(nc)
Computer scientists	80	0.1	(nc)
Computer systems analysts	40	<	15
Network and computer systems administrators	40	<	9
Physical scientists	230	0.2	(nc)
Chemists	230	0.2	8
Engineers	1,150	0.9	(nc)
Electrical/electronics	50	<	(nc)
Electrical	50	<	14
Industrial	330	0.3	9
Mechanical	340	0.3	18
Sales	70	0.1	8
Other engineers	360	0.3	(nc)
Chemical	110	0.1	43
Environmental	70	0.1	13
Metallurgical/metallurgists	110	0.1	12
Safety	70	0.1	10
Technicians	830	0.6	(nc)
Computer, numerical tool, and process control programmers	100	0.1	(nc)
Computer programmers	60	0.1	12
Numerical tool and process control programmers	40	<	20
Drafters	60	0.1	(nc)
Mechanical drafters	60	0.1	16
Engineering technicians	380	0.3	(nc)
Electrical/electronics engineering technicians	50	<	23
Electro-mechanical technicians	30	<	25
Environmental engineering technicians	120	0.1	14
Industrial engineering technicians	100	0.1	13
Mechanical engineering technicians	80	0.1	15
Physical and life science technicians	290	0.2	(nc)
Chemical technicians, except health	220	0.2	7
Environmental science and protection technicians, including health	70	0.1	14
Ordnance and accessories, n.e.c. (SIC 3480)			
Scientific and technical personnel.....	4,510	11.5	(nc)
Managers of scientific and technical personnel	580	1.5	(nc)
Computer and information systems managers	150	0.4	10
Engineering managers	430	1.1	9
Scientists	570	1.5	(nc)
Computer scientists	530	1.4	(nc)
Computer software, applications	190	0.5	35
Computer systems analysts	270	0.7	23
Network and computer systems administrators	70	0.2	3
Social scientists	40	0.1	(nc)
Market research analysts	40	0.1	24

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Ordnance and accessories, n.e.c. (SIC 3480) -- continued:			
Engineers	2,120	5.4	(nc)
Electrical/electronics	220	0.6	(nc)
Electronics	220	0.6	6
Industrial	540	1.4	7
Mechanical	1,210	3.1	28
Other engineers	150	0.4	(nc)
Environmental	150	0.4	3
Technicians	1,240	3.2	(nc)
Computer, numerical tool, and process control programmers	270	0.7	(nc)
Numerical tool and process control programmers	270	0.7	29
Drafters	110	0.3	(nc)
Mechanical drafters	110	0.3	7
Engineering technicians	860	2.2	(nc)
Electrical/electronics engineering technicians	290	0.7	3
Electro-mechanical technicians	30	0.1	<
Industrial engineering technicians	240	0.6	6
Mechanical engineering technicians	300	0.8	6
Misc. fabricated metal products (SIC 3490)			
Scientific and technical personnel	12,080	4.8	(nc)
Managers of scientific and technical personnel	1,640	0.6	(nc)
Computer and information systems managers	430	0.2	4
Engineering managers	1,210	0.5	3
Scientists	950	0.4	(nc)
Computer scientists	800	0.3	(nc)
Computer software, applications	150	0.1	12
Computer systems analysts	270	0.1	5
Network and computer systems administrators	300	0.1	6
Network systems/data communications analysts	80	<	11
Physical scientists	60	<	(nc)
Chemists	60	<	20
Social scientists	90	<	(nc)
Market research analysts	90	<	8

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Misc. fabricated metal products (SIC 3490) -- continued:			
Engineers	5,410	2.1	(nc)
Civil	90	<	49
Computer	30	<	20
Electrical/electronics	250	0.1	(nc)
Electrical	150	0.1	8
Electronics	100	<	13
Industrial	1,760	0.7	5
Mechanical	2,230	0.9	3
Sales	510	0.2	13
Other engineers	540	0.2	(nc)
Chemical	40	<	12
Environmental	60	<	12
Metallurgical/metallurgists	330	0.1	7
Safety	110	<	5
Technicians	4,080	1.6	(nc)
Computer, numerical tool, and process control programmers	960	0.4	(nc)
Computer programmers	370	0.1	8
Numerical tool and process control programmers	590	0.2	11
Drafters	1,420	0.6	(nc)
Architectural and civil drafters	40	<	14
Electrical and electronics drafters	50	<	12
Mechanical drafters	1,330	0.5	5
Engineering technicians	1,570	0.6	(nc)
Electrical/electronics engineering technicians	270	0.1	11
Electro-mechanical technicians	170	0.1	13
Environmental engineering technicians	40	<	28
Industrial engineering technicians	590	0.2	8
Mechanical engineering technicians	500	0.2	6
Physical and life science technicians	130	0.1	(nc)
Chemical technicians, except health	90	<	20
Environmental science and protection technicians, including health	40	<	21
Engines and turbines (SIC 3510)			
Scientific and technical personnel.....	10,130	12.3	(nc)
Managers of scientific and technical personnel	1,050	1.3	(nc)
Computer and information systems managers	110	0.1	18
Engineering managers	940	1.1	15
Scientists	620	0.8	(nc)
Computer scientists	620	0.8	(nc)
Computer software, applications	170	0.2	38
Computer software, systems	140	0.2	22
Computer systems analysts	270	0.3	29
Network and computer systems administrators	40	0.1	24

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Engines and turbines (SIC 3510) -- continued:			
Engineers	6,360	7.7	(nc)
Electrical/electronics	330	0.4	(nc)
Electrical	270	0.3	27
Electronics	60	0.1	10
Industrial	1,550	1.9	17
Mechanical	3,840	4.6	21
Sales	210	0.3	12
Other engineers	430	0.5	(nc)
Metallurgical/metallurgists	330	0.4	24
Safety	100	0.1	23
Technicians	2,100	2.5	(nc)
Computer, numerical tool, and process control programmers	300	0.4	(nc)
Computer programmers	70	0.1	20
Numerical tool and process control programmers	230	0.3	8
Drafters	630	0.8	(nc)
Electrical and electronics drafters	30	<	20
Mechanical drafters	600	0.7	22
Engineering technicians	1,170	1.4	(nc)
Electrical/electronics engineering technicians	230	0.3	34
Electro-mechanical technicians	80	0.1	33
Industrial engineering technicians	430	0.5	29
Mechanical engineering technicians	430	0.5	25
Farm and garden machinery (SIC 3520)			
Scientific and technical personnel.....	5,920	6.7	(nc)
Managers of scientific and technical personnel	710	0.8	(nc)
Computer and information systems managers	190	0.2	18
Engineering managers	520	0.6	10
Scientists	210	0.2	(nc)
Computer scientists	100	0.1	(nc)
Computer software, applications	70	0.1	23
Network systems/data communications analysts	30	<	26
Social scientists	110	0.1	(nc)
Market research analysts	110	0.1	47
Engineers	2,110	2.4	(nc)
Electrical/electronics	40	0.1	(nc)
Electronics	40	0.1	23
Industrial	560	0.6	12
Mechanical	1,150	1.3	12
Sales	80	0.1	15
Other engineers	280	0.3	(nc)
Agricultural	50	0.1	20
Chemical	100	0.1	40
Metallurgical/metallurgists	100	0.1	23
Safety	30	<	10

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Farm and garden machinery (SIC 3520) -- continued:			
Technicians	2,890	3.3	(nc)
Computer, numerical tool, and process control programmers	1,350	1.5	(nc)
Computer programmers	120	0.1	13
Numerical tool and process control programmers	1,230	1.4	50
Drafters	680	0.8	(nc)
Electrical and electronics drafters	60	0.1	35
Mechanical drafters	620	0.7	10
Engineering technicians	860	1.0	(nc)
Electrical/electronics engineering technicians	190	0.2	25
Electro-mechanical technicians	70	0.1	23
Industrial engineering technicians	240	0.3	9
Mechanical engineering technicians	360	0.4	9
Construction and related machinery (SIC 3530)			
Scientific and technical personnel.....	24,000	11.0	(nc)
Managers of scientific and technical personnel	2,780	1.3	(nc)
Computer and information systems managers	730	0.3	11
Engineering managers	2,050	0.9	5
Scientists	1,400	0.7	(nc)
Computer scientists	1,320	0.6	(nc)
Computer and information scientists, research	40	<	23
Computer software, applications	290	0.1	8
Computer software, systems	230	0.1	18
Computer systems analysts	660	0.3	10
Network and computer systems administrators	100	0.1	13
Social scientists	80	<	(nc)
Market research analysts	80	<	11
Engineers	12,780	5.9	(nc)
Civil	60	<	36
Computer	100	0.1	17
Electrical/electronics	1,110	0.5	(nc)
Electrical	920	0.4	8
Electronics	190	0.1	14
Industrial	2,420	1.1	7
Mechanical	7,480	3.4	5
Sales	1,080	0.5	7
Other engineers	530	0.2	(nc)
Chemical	80	<	36
Metallurgical/metallurgists	330	0.2	10
Safety	120	0.1	6

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Construction and related machinery (SIC 3530) -- continued:			
Technicians	7,040	3.2	(nc)
Computer, numerical tool, and process control programmers	1,060	0.5	(nc)
Computer programmers	490	0.2	8
Numerical tool and process control programmers	570	0.3	10
Drafters	3,190	1.5	(nc)
Electrical and electronics drafters	250	0.1	12
Mechanical drafters	2,940	1.4	6
Engineering technicians	2,640	1.2	(nc)
Electrical/electronics engineering technicians	540	0.3	9
Electro-mechanical technicians	210	0.1	10
Industrial engineering technicians	960	0.4	13
Mechanical engineering technicians	930	0.4	10
Physical and life science technicians	150	0.1	(nc)
Chemical technicians, except health	100	0.1	10
Geological and petroleum technicians	50	<	26
Metalworking machinery (SIC 3540)			
Scientific and technical personnel.....	25,280	9.0	(nc)
Managers of scientific and technical personnel	2,300	0.8	(nc)
Computer and information systems managers	640	0.2	8
Engineering managers	1,660	0.6	5
Scientists	1,350	0.5	(nc)
Computer scientists	1,240	0.4	(nc)
Computer software, applications	620	0.2	18
Computer software, systems	250	0.1	12
Computer systems analysts	280	0.1	6
Network and computer systems administrators	90	<	13
Physical scientists	40	<	(nc)
Materials scientists	40	<	34
Social scientists	70	<	(nc)
Market research analysts	70	<	11
Engineers	11,260	4.0	(nc)
Computer	130	0.1	33
Electrical/electronics	1,430	0.5	(nc)
Electrical	1,010	0.4	7
Electronics	420	0.2	17
Industrial	1,840	0.7	9
Mechanical	6,020	2.1	4
Sales	1,530	0.5	11
Other engineers	310	0.1	(nc)
Metallurgical/metallurgists	240	0.1	10
Safety	70	<	7

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Metalworking machinery (SIC 3540) -- continued:			
Technicians	10,370	3.7	(nc)
Computer, numerical tool, and process control programmers	4,040	1.4	(nc)
Computer programmers	920	0.3	8
Numerical tool and process control programmers	3,120	1.1	6
Drafters	4,410	1.6	(nc)
Electrical and electronics drafters	270	0.1	16
Mechanical drafters	4,140	1.5	7
Engineering technicians	1,890	0.7	(nc)
Electrical/electronics engineering technicians	540	0.2	10
Electro-mechanical technicians	230	0.1	16
Industrial engineering technicians	480	0.2	8
Mechanical engineering technicians	640	0.2	16
Physical and life science technicians	30	<	(nc)
Chemical technicians, except health	30	<	26
Special industry machinery (SIC 3550)			
Scientific and technical personnel.....	24,990	17.1	(nc)
Managers of scientific and technical personnel	2,890	2.0	(nc)
Computer and information systems managers	510	0.4	7
Engineering managers	2,380	1.6	10
Scientists	2,340	1.6	(nc)
Computer scientists	2,050	1.4	(nc)
Computer and information scientists, research	30	<	16
Computer software, applications	900	0.6	8
Computer software, systems	650	0.4	15
Computer systems analysts	340	0.2	14
Network and computer systems administrators	80	0.1	17
Network systems/data communications analysts	50	<	32
Mathematical scientists	70	0.1	(nc)
Operations and systems researchers and analysts	70	0.1	7
Physical scientists	120	0.1	(nc)
Materials scientists	120	0.1	29
Social scientists	100	0.1	(nc)
Market research analysts	100	0.1	12
Engineers	11,900	8.1	(nc)
Computer	190	0.1	14
Electrical/electronics	2,920	2.0	(nc)
Electrical	2,030	1.4	7
Electronics	890	0.6	25
Industrial	1,500	1.0	6
Mechanical	5,560	3.8	5
Sales	1,270	0.9	6
Other engineers	460	0.3	(nc)
Chemical	120	0.1	27
Metallurgical/metallurgists	270	0.2	14
Safety	70	0.1	11

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Special industry machinery (SIC 3550) -- continued:			
Technicians	7,860	5.4	(nc)
Computer, numerical tool, and process control programmers	1,020	0.7	(nc)
Computer programmers	530	0.4	10
Numerical tool and process control programmers	490	0.3	12
Drafters	2,820	1.9	(nc)
Electrical and electronics drafters	610	0.4	26
Mechanical drafters	2,210	1.5	6
Engineering technicians	3,930	2.7	(nc)
Aerospace engineering and operations technicians	40	<	18
Electrical/electronics engineering technicians	1,560	1.1	8
Electro-mechanical technicians	640	0.4	23
Industrial engineering technicians	830	0.6	15
Mechanical engineering technicians	860	0.6	10
Physical and life science technicians	90	0.1	(nc)
Chemical technicians, except health	90	0.1	20
General industrial machinery (SIC 3560)			
Scientific and technical personnel.....	26,430	11.6	(nc)
Managers of scientific and technical personnel	3,090	1.4	(nc)
Computer and information systems managers	690	0.3	4
Engineering managers	2,400	1.1	7
Scientists	1,770	0.8	(nc)
Computer scientists	1,490	0.7	(nc)
Computer and information scientists, research	40	<	14
Computer software, applications	620	0.3	9
Computer software, systems	290	0.1	11
Computer systems analysts	440	0.2	9
Network and computer systems administrators	70	<	8
Network systems/data communications analysts	30	<	8
Mathematical scientists	40	<	(nc)
Operations and systems researchers and analysts	40	<	20
Physical scientists	50	<	(nc)
Materials scientists	50	<	21
Social scientists	190	0.1	(nc)
Market research analysts	190	0.1	12

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
General industrial machinery (SIC 3560) -- continued:			
Engineers	14,090	6.2	(nc)
Aeronautical	70	<	6
Civil	40	<	13
Computer	70	<	19
Electrical/electronics	2,150	1.0	(nc)
Electrical	1,560	0.7	9
Electronics	590	0.3	8
Industrial	3,290	1.4	15
Mechanical	5,670	2.5	3
Sales	2,180	1.0	5
Other engineers	620	0.3	(nc)
Chemical	140	0.1	11
Metallurgical/metallurgists	370	0.2	10
Safety	110	0.1	7
Technicians	7,480	3.3	(nc)
Computer, numerical tool, and process control programmers	1,270	0.6	(nc)
Computer programmers	540	0.2	4
Numerical tool and process control programmers	730	0.3	7
Drafters	2,850	1.3	(nc)
Electrical and electronics drafters	330	0.1	9
Mechanical drafters	2,520	1.1	3
Engineering technicians	3,240	1.4	(nc)
Electrical/electronics engineering technicians	1,000	0.4	7
Electro-mechanical technicians	340	0.2	11
Environmental engineering technicians	40	<	45
Industrial engineering technicians	650	0.3	6
Mechanical engineering technicians	1,210	0.5	10
Physical and life science technicians	120	0.1	(nc)
Chemical technicians, except health	90	<	14
Environmental science and protection technicians, including health	30	<	17
Computer and office equipment (SIC 3570)			
Scientific and technical personnel.....	118,650	37.2	(nc)
Managers of scientific and technical personnel	9,800	3.1	(nc)
Computer and information systems managers	3,620	1.1	8
Engineering managers	6,180	1.9	6
Scientists	55,100	17.3	(nc)
Computer scientists	51,470	16.1	(nc)
Computer and information scientists, research	640	0.2	30
Computer software, applications	13,470	4.2	12
Computer software, systems	27,950	8.8	10
Computer systems analysts	5,320	1.7	7
Network and computer systems administrators	1,220	0.4	8
Network systems/data communications analysts	2,870	0.9	19

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Computer and office equipment (SIC 3570) -- continued:			
Mathematical scientists	780	0.2	(nc)
Operations and systems researchers and analysts	780	0.2	14
Social scientists	2,850	0.9	(nc)
Market research analysts	2,850	0.9	11
Engineers			
Civil	200	0.1	41
Computer	11,110	3.5	7
Electrical/electronics	11,310	3.6	(nc)
Electrical	6,180	1.9	10
Electronics	5,130	1.6	14
Industrial	4,990	1.6	6
Mechanical	2,570	0.8	13
Sales	1,190	0.4	13
Other engineers	2,040	0.6	(nc)
Chemical	200	0.1	21
Environmental	880	0.3	46
Metallurgical/metallurgists	730	0.2	20
Safety	230	0.1	7
Technicians			
Computer, numerical tool, and process control programmers	20,340	6.4	(nc)
Computer programmers	10,350	3.2	(nc)
Computer programmers	10,280	3.2	11
Numerical tool and process control programmers	70	<	30
Drafters	1,360	0.4	(nc)
Electrical and electronics drafters	940	0.3	17
Mechanical drafters	420	0.1	8
Engineering technicians	8,500	2.7	(nc)
Electrical/electronics engineering technicians	5,860	1.8	7
Electro-mechanical technicians	1,080	0.3	14
Industrial engineering technicians	1,560	0.5	13
Physical and life science technicians	130	<	(nc)
Chemical technicians, except health	130	<	22
Refrigeration and service machinery (SIC 3580)			
Scientific and technical personnel.....	14,010	7.5	(nc)
Managers of scientific and technical personnel			
Computer and information systems managers	1,480	0.8	(nc)
Engineering managers	350	0.2	4
Engineering managers	1,130	0.6	6

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Refrigeration and service machinery (SIC 3580) -- continued:			
Scientists	830	0.4	(nc)
Computer scientists	680	0.4	(nc)
Computer software, applications	270	0.1	10
Computer systems analysts	350	0.2	8
Network and computer systems administrators	60	<	14
Physical scientists	60	<	(nc)
Chemists	60	<	24
Social scientists	90	0.1	(nc)
Market research analysts	90	0.1	12
Engineers	7,000	3.8	(nc)
Electrical/electronics	770	0.4	(nc)
Electrical	490	0.3	8
Electronics	280	0.2	13
Industrial	2,070	1.1	20
Mechanical	2,940	1.6	6
Sales	720	0.4	10
Other engineers	500	0.3	(nc)
Chemical	150	0.1	18
Metallurgical/metallurgists	180	0.1	13
Safety	170	0.1	6
Technicians	4,700	2.5	(nc)
Computer, numerical tool, and process control programmers	620	0.3	(nc)
Computer programmers	380	0.2	7
Numerical tool and process control programmers	240	0.1	12
Drafters	1,880	1.0	(nc)
Architectural and civil drafters	110	0.1	30
Electrical and electronics drafters	190	0.1	17
Mechanical drafters	1,580	0.9	5
Engineering technicians	2,100	1.1	(nc)
Electronical/electronics engineering technicians	300	0.2	7
Electro-mechanical technicians	100	0.1	12
Industrial engineering technicians	560	0.3	11
Mechanical engineering technicians	1,140	0.6	17
Physical and life science technicians	100	0.1	(nc)
Chemical technicians, except health	100	0.1	16
Industrial machinery, n.e.c. (SIC 3590)			
Scientific and technical personnel.....	17,660	5.3	(nc)
Managers of scientific and technical personnel	1,800	0.6	(nc)
Computer and information systems managers	450	0.1	5
Engineering managers	1,350	0.4	5

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Industrial machinery, n.e.c. (SIC 3590) -- continued:			
Scientists	670	0.2	(nc)
Computer scientists	570	0.2	(nc)
Computer and information scientists, research	70	<	31
Computer software, applications	220	0.1	18
Computer software, systems	80	<	11
Computer systems analysts	160	0.1	7
Network and computer systems administrators	40	<	10
Social scientists	100	<	(nc)
Market research analysts	100	<	19
Engineers	7,490	2.3	(nc)
Aeronautical	330	0.1	35
Computer	50	<	31
Electrical/electronics	580	0.2	(nc)
Electrical	370	0.1	10
Electronics	210	0.1	10
Industrial	1,850	0.6	7
Mechanical	3,550	1.1	6
Sales	690	0.2	10
Other engineers	440	0.1	(nc)
Chemical	30	<	18
Metallurgical/metallurgists	290	0.1	14
Safety	120	<	20
Technicians	7,700	2.3	(nc)
Computer, numerical tool, and process control programmers	3,870	1.2	(nc)
Computer programmers	640	0.2	8
Numerical tool and process control programmers	3,230	1.0	6
Drafters	1,590	0.5	(nc)
Electrical and electronics drafters	220	0.1	14
Mechanical drafters	1,370	0.4	7
Engineering technicians	2,080	0.6	(nc)
Aerospace engineering and operations technicians	80	<	21
Electronical/electronics engineering technicians	610	0.2	13
Electro-mechanical technicians	120	<	10
Industrial engineering technicians	490	0.2	14
Mechanical engineering technicians	780	0.2	12
Physical and life science technicians	160	0.1	(nc)
Chemical technicians, except health	160	0.1	31
Electric distribution equipment (SIC 3610)			
Scientific and technical personnel.....	9,990	13.3	(nc)
Managers of scientific and technical personnel	880	1.2	(nc)
Computer and information systems managers	240	0.3	7
Engineering managers	640	0.9	5

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Electric distribution equipment (SIC 3610) -- continued:			
Scientists	1,020	1.4	(nc)
Computer scientists	880	1.2	(nc)
Computer software, applications	200	0.3	7
Computer software, systems	260	0.4	11
Computer systems analysts	300	0.4	8
Network and computer systems administrators	120	0.2	10
Social scientists	140	0.2	(nc)
Market research analysts	140	0.2	14
Engineers	4,660	6.2	(nc)
Computer	40	0.1	27
Electrical/electronics	2,360	3.1	(nc)
Electrical	1,660	2.2	5
Electronics	700	0.9	17
Industrial	760	1.0	7
Mechanical	850	1.1	8
Sales	480	0.6	11
Other engineers	170	0.2	(nc)
Metallurgical/metallurgists	110	0.2	13
Safety	60	0.1	9
Technicians	3,430	4.6	(nc)
Computer, numerical tool, and process control programmers	290	0.4	(nc)
Computer programmers	180	0.2	10
Numerical tool and process control programmers	110	0.2	14
Drafters	1,070	1.4	(nc)
Electrical and electronics drafters	660	0.9	8
Mechanical drafters	410	0.5	7
Engineering technicians	2,070	2.8	(nc)
Electrical/electronics engineering technicians	1,430	1.9	8
Electro-mechanical technicians	240	0.3	13
Industrial engineering technicians	200	0.3	8
Mechanical engineering technicians	200	0.3	13
Electrical industrial apparatus (SIC 3620)			
Scientific and technical personnel.....	17,870	13.7	(nc)
Managers of scientific and technical personnel	1,470	1.1	(nc)
Computer and information systems managers	320	0.2	6
Engineering managers	1,150	0.9	4
Scientists	1,560	1.2	(nc)
Computer scientists	1,290	1.0	(nc)
Computer software, applications	570	0.4	10
Computer software, systems	240	0.2	19
Computer systems analysts	200	0.2	23
Network and computer systems administrators	170	0.1	6
Network systems/data communications analysts	110	0.1	23

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Electrical industrial apparatus (SIC 3620) -- continued:			
Social scientists	270	0.2	(nc)
Market research analysts	270	0.2	28
Engineers	8,750	6.7	(nc)
Aeronautical	50	<	23
Computer	110	0.1	13
Electrical/electronics	4,310	3.3	(nc)
Electrical	3,170	2.4	6
Electronics	1,140	0.9	11
Industrial	1,420	1.1	5
Mechanical	1,580	1.2	5
Sales	1,040	0.8	14
Other engineers	240	0.2	(nc)
Chemical	60	0.1	23
Environmental	40	<	11
Metallurgical/metallurgists	70	0.1	11
Safety	70	0.1	11
Technicians	6,090	4.7	(nc)
Computer, numerical tool, and process control programmers	490	0.4	(nc)
Computer programmers	260	0.2	8
Numerical tool and process control programmers	230	0.2	7
Drafters	1,450	1.1	(nc)
Electrical and electronics drafters	970	0.7	6
Mechanical drafters	480	0.4	7
Engineering technicians	4,080	3.1	(nc)
Aerospace engineering and operations technicians	40	<	32
Electronical/electronics engineering technicians	2,630	2.0	7
Electro-mechanical technicians	300	0.2	12
Industrial engineering technicians	630	0.5	6
Mechanical engineering technicians	480	0.4	10
Physical and life science technicians	70	0.1	(nc)
Chemical technicians, except health	70	0.1	13
Household appliances (SIC 3630)			
Scientific and technical personnel.....	4,010	3.8	(nc)
Managers of scientific and technical personnel	590	0.6	(nc)
Computer and information systems managers	250	0.2	13
Engineering managers	340	0.3	17
Scientists	310	0.3	(nc)
Computer scientists	190	0.2	(nc)
Computer software, applications	40	<	15
Network and computer systems administrators	80	0.1	12
Network systems/data communications analysts	70	0.1	23
Social scientists	120	0.1	(nc)
Market research analysts	120	0.1	22

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Household appliances (SIC 3630) -- continued:			
Engineers	1,950	1.9	(nc)
Electrical/electronics	210	0.2	(nc)
Electrical	180	0.2	8
Electronics	30	<	18
Industrial	950	0.9	23
Mechanical	590	0.6	15
Other engineers	200	0.2	(nc)
Environmental	60	0.1	41
Metallurgical/metallurgists	90	0.1	28
Safety	50	0.1	16
Technicians	1,160	1.1	(nc)
Computer, numerical tool, and process control programmers	250	0.2	(nc)
Computer programmers	120	0.1	19
Numerical tool and process control programmers	130	0.1	32
Drafters	230	0.2	(nc)
Electrical and electronics drafters	50	0.1	21
Mechanical drafters	180	0.2	17
Engineering technicians	680	0.7	(nc)
Electrical/electronics engineering technicians	220	0.2	34
Electro-mechanical technicians	50	0.1	18
Industrial engineering technicians	270	0.3	15
Mechanical engineering technicians	140	0.1	16
Electric lighting and wiring equipment (SIC 3640)			
Scientific and technical personnel.....	10,880	6.8	(nc)
Managers of scientific and technical personnel	1,250	0.8	(nc)
Computer and information systems managers	380	0.2	6
Engineering managers	870	0.5	4
Scientists	1,420	0.9	(nc)
Computer scientists	1,110	0.7	(nc)
Computer software, applications	340	0.2	25
Computer software, systems	120	0.1	9
Computer systems analysts	300	0.2	5
Network and computer systems administrators	250	0.2	6
Network systems/data communications analysts	100	0.1	14
Mathematical scientists	40	<	(nc)
Operations and systems researchers and analysts	40	<	24
Physical scientists	50	<	(nc)
Chemists	50	<	27
Social scientists	220	0.1	(nc)
Market research analysts	220	0.1	17

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Electric lighting and wiring equipment (SIC 3640) -- continued:			
Engineers	4,910	3.1	(nc)
Computer	90	0.1	17
Electrical/electronics	1,740	1.1	(nc)
Electrical	1,030	0.6	7
Electronics	710	0.4	11
Industrial	1,200	0.7	6
Mechanical	1,060	0.7	6
Sales	550	0.3	8
Other engineers	270	0.2	(nc)
Chemical	30	<	9
Metallurgical/metallurgists	170	0.1	15
Safety	70	<	9
Technicians	3,300	2.1	(nc)
Computer, numerical tool, and process control programmers	580	0.4	(nc)
Computer programmers	300	0.2	8
Numerical tool and process control programmers	280	0.2	16
Drafters	910	0.6	(nc)
Electrical and electronics drafters	490	0.3	10
Mechanical drafters	420	0.3	6
Engineering technicians	1,760	1.1	(nc)
Electrical/electronics engineering technicians	950	0.6	11
Electro-mechanical technicians	220	0.1	12
Industrial engineering technicians	420	0.3	10
Mechanical engineering technicians	170	0.1	14
Physical and life science technicians	50	<	(nc)
Chemical technicians, except health	50	<	26
Household audio and video equipment (SIC 3650)			
Scientific and technical personnel.....	9,120	13.2	(nc)
Managers of scientific and technical personnel	910	1.3	(nc)
Computer and information systems managers	310	0.5	19
Engineering managers	600	0.9	10
Scientists	1,440	2.1	(nc)
Computer scientists	1,270	1.8	(nc)
Computer software, applications	260	0.4	12
Computer software, systems	110	0.2	12
Computer systems analysts	560	0.8	26
Network and computer systems administrators	200	0.3	12
Network systems/data communications analysts	140	0.2	21
Social scientists	170	0.3	(nc)
Market research analysts	170	0.3	18

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Household audio and video equipment (SIC 3650) -- continued:			
Engineers	3,640	5.3	(nc)
Computer	40	0.1	24
Electrical/electronics	1,950	2.8	(nc)
Electrical	1,120	1.6	25
Electronics	830	1.2	8
Industrial	550	0.8	14
Mechanical	850	1.2	26
Sales	220	0.3	18
Other engineers	30	<	(nc)
Metallurgical/metallurgists	30	<	23
Technicians	3,130	4.5	(nc)
Computer, numerical tool, and process control programmers	170	0.3	(nc)
Computer programmers	170	0.3	11
Drafters	180	0.3	(nc)
Electrical and electronics drafters	130	0.2	15
Mechanical drafters	50	0.1	16
Engineering technicians	2,780	4.0	(nc)
Electrical/electronics engineering technicians	1,610	2.3	10
Electro-mechanical technicians	640	0.9	19
Industrial engineering technicians	200	0.3	16
Mechanical engineering technicians	90	0.1	17
All other engineering technicians	240	0.3	(nc)
Audio and video equipment technicians	190	0.3	42
Broadcast technicians	50	0.1	28
Communication equipment (SIC 3660)			
Scientific and technical personnel.....	64,310	26.6	(nc)
Managers of scientific and technical personnel	5,420	2.2	(nc)
Computer and information systems managers	1,260	0.5	11
Engineering managers	4,160	1.7	6
Scientists	19,700	8.1	(nc)
Computer scientists	17,860	7.4	(nc)
Computer and information scientists, research	760	0.3	37
Computer software, applications	6,550	2.7	16
Computer software, systems	7,220	3.0	13
Computer systems analysts	1,580	0.7	26
Network and computer systems administrators	1,100	0.5	12
Network systems/data communications analysts	650	0.3	15
Mathematical scientists	50	<	(nc)
Operations and systems researchers and analysts	50	<	18
Social scientists	1,790	0.7	(nc)
Market research analysts	1,790	0.7	18

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Communication equipment (SIC 3660) -- continued:			
Engineers	23,030	9.5	(nc)
Aeronautical	60	<	44
Civil	220	0.1	42
Computer	3,190	1.3	17
Electrical/electronics	10,920	4.5	(nc)
Electrical	5,870	2.4	10
Electronics	5,050	2.1	7
Industrial	4,210	1.7	16
Mechanical	2,470	1.0	14
Sales	1,660	0.7	16
Other engineers	300	0.1	(nc)
Chemical	40	<	24
Metallurgical/metallurgists	170	0.1	19
Safety	90	<	17
Technicians	16,160	6.7	(nc)
Computer, numerical tool, and process control programmers	2,090	0.9	(nc)
Computer programmers	1,950	0.8	31
Numerical tool and process control programmers	140	0.1	18
Drafters	1,590	0.7	(nc)
Electrical and electronics drafters	940	0.4	6
Mechanical drafters	650	0.3	12
Engineering technicians	12,480	5.2	(nc)
Civil engineering technicians	70	<	44
Electrical/electronics engineering technicians	9,040	3.7	7
Electro-mechanical technicians	1,670	0.7	27
Industrial engineering technicians	1,700	0.7	17
Electronic components and accessories (SIC 3670)			
Scientific and technical personnel.....	151,710	26.0	(nc)
Managers of scientific and technical personnel	12,620	2.2	(nc)
Computer and information systems managers	3,300	0.6	9
Engineering managers	9,320	1.6	7
Scientists	22,700	3.9	(nc)
Computer scientists	19,870	3.4	(nc)
Computer and information scientists, research	300	0.1	34
Computer software, applications	8,110	1.4	14
Computer software, systems	5,810	1.0	10
Computer systems analysts	2,510	0.4	7
Network and computer systems administrators	1,580	0.3	7
Network systems/data communications analysts	1,560	0.3	31
Mathematical scientists	100	<	(nc)
Operations and systems researchers and analysts	100	<	28

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Electronic components and accessories (SIC 3670) -- continued:			
Physical scientists	500	0.1	(nc)
Chemists	460	0.1	18
Physicists	40	<	38
Social scientists	2,230	0.4	(nc)
Market research analysts	2,230	0.4	21
Engineers	59,070	10.1	(nc)
Aeronautical	60	<	32
Civil	240	<	37
Computer	12,270	2.1	22
Electrical/electronics	25,820	4.4	(nc)
Electrical	10,420	1.8	14
Electronics	15,400	2.6	14
Industrial	9,120	1.6	6
Mechanical	5,430	0.9	12
Sales	2,560	0.4	19
Other engineers	3,570	0.6	(nc)
Chemical	1,000	0.2	20
Environmental	270	0.1	9
Metallurgical/metallurgists	1,790	0.3	7
Safety	510	0.1	8
Technicians	57,320	9.8	(nc)
Computer, numerical tool, and process control programmers	3,440	0.6	(nc)
Computer programmers	2,990	0.5	10
Numerical tool and process control programmers	450	0.1	13
Drafters	3,820	0.7	(nc)
Architectural and civil drafters	30	<	19
Electrical and electronics drafters	2,970	0.5	25
Mechanical drafters	820	0.1	8
Engineering technicians	49,320	8.4	(nc)
Aerospace engineering and operations technicians	370	0.1	35
Electronical/electronics engineering technicians	35,760	6.1	12
Electro-mechanical technicians	2,750	0.5	8
Environmental engineering technicians	370	0.1	14
Industrial engineering technicians	7,930	1.4	27
Mechanical engineering technicians	2,140	0.4	13
Physical and life science technicians	740	0.1	(nc)
Chemical technicians, except health	740	0.1	16
Misc. electrical equipment & supplies (SIC 3690)			
Scientific and technical personnel	11,820	9.6	(nc)
Managers of scientific and technical personnel	1,040	0.9	(nc)
Computer and information systems managers	180	0.2	5
Engineering managers	860	0.7	5

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Misc. electrical equipment & supplies (SIC 3690) -- continued:			
Scientists	1,510	1.2	(nc)
Computer scientists	1,170	0.9	(nc)
Computer software, applications	420	0.3	9
Computer software, systems	330	0.3	8
Computer systems analysts	140	0.1	7
Network and computer systems administrators	200	0.2	6
Network systems/data communications analysts	80	0.1	8
Mathematical scientists	40	<	(nc)
Operations and systems researchers and analysts	40	<	6
Physical scientists	110	0.1	(nc)
Chemists	110	0.1	15
Social scientists	190	0.2	(nc)
Market research analysts	190	0.2	16
Engineers	5,120	4.2	(nc)
Aeronautical	200	0.2	13
Civil	40	<	6
Computer	100	0.1	25
Electrical/electronics	1,590	1.3	(nc)
Electrical	990	0.8	6
Electronics	600	0.5	8
Industrial	1,260	1.0	6
Mechanical	1,240	1.0	6
Sales	200	0.2	11
Other engineers	490	0.4	(nc)
Chemical	160	0.1	9
Environmental	50	<	11
Metallurgical/metallurgists	180	0.2	20
Safety	100	0.1	7
Technicians	4,150	3.4	(nc)
Computer, numerical tool, and process control programmers	330	0.3	(nc)
Computer programmers	170	0.1	11
Numerical tool and process control programmers	160	0.1	21
Drafters	640	0.5	(nc)
Electrical and electronics drafters	290	0.2	7
Mechanical drafters	350	0.3	9
Engineering technicians	3,020	2.5	(nc)
Electronical/electronics engineering technicians	1,690	1.4	5
Electro-mechanical technicians	380	0.3	10
Environmental engineering technicians	40	<	17
Industrial engineering technicians	520	0.4	9
Mechanical engineering technicians	390	0.3	9
Physical and life science technicians	160	0.1	(nc)
Chemical technicians, except health	160	0.1	18

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Motor vehicles and equipment (SIC 3710)			
Scientific and technical personnel.....	46,920	5.1	(nc)
Managers of scientific and technical personnel	6,510	0.7	(nc)
Computer and information systems managers	1,170	0.1	9
Engineering managers	5,340	0.6	3
Scientists	2,810	0.3	(nc)
Computer scientists	2,110	0.2	(nc)
Computer and information scientists, research	50	<	19
Computer software, applications	420	0.1	13
Computer software, systems	190	<	6
Computer systems analysts	1,180	0.1	5
Network and computer systems administrators	160	<	7
Network systems/data communications analysts	110	<	6
Mathematical scientists	380	<	(nc)
Operations and systems researchers and analysts	380	<	12
Physical scientists	60	<	(nc)
Materials scientists	60	<	20
Social scientists	260	<	(nc)
Market research analysts	260	<	18
Engineers	26,060	2.8	(nc)
Civil	50	<	15
Computer	180	<	28
Electrical/electronics	1,460	0.2	(nc)
Electrical	1,220	0.1	13
Electronics	240	<	8
Industrial	12,990	1.4	3
Mechanical	8,550	0.9	4
Sales	810	0.1	18
Other engineers	2,020	0.2	(nc)
Chemical	110	<	11
Environmental	130	<	36
Metallurgical/metallurgists	1,120	0.1	10
Safety	660	0.1	9
Technicians	11,540	1.3	(nc)
Computer, numerical tool, and process control programmers	1,910	0.2	(nc)
Computer programmers	1,240	0.1	29
Numerical tool and process control programmers	670	0.1	10
Drafters	3,080	0.3	(nc)
Electrical and electronics drafters	210	<	11
Mechanical drafters	2,870	0.3	3

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Motor vehicles and equipment (SIC 3710) -- continued:			
Engineering technicians	6,290	0.7	(nc)
Aerospace engineering and operations technicians	40	<	29
Electrical/electronics engineering technicians	1,080	0.1	9
Electro-mechanical technicians	540	0.1	10
Industrial engineering technicians	2,450	0.3	7
Mechanical engineering technicians	2,180	0.2	6
Physical and life science technicians	260	<	(nc)
Chemical technicians, except health	170	<	7
Environmental science and protection technicians, including health	90	<	16
Aircraft and parts (SIC 3720)			
Scientific and technical personnel.....	106,730	23.7	(nc)
Managers of scientific and technical personnel	9,170	2.0	(nc)
Computer and information systems managers	1,820	0.4	8
Engineering managers	7,350	1.6	6
Scientists	18,780	4.2	(nc)
Computer scientists	14,400	3.2	(nc)
Computer and information scientists, research	130	<	31
Computer software, applications	1,210	0.3	5
Computer software, systems	3,620	0.8	11
Computer systems analysts	7,120	1.6	8
Network and computer systems administrators	1,540	0.3	9
Network systems/data communications analysts	780	0.2	18
Mathematical scientists	3,450	0.8	(nc)
Mathematicians	120	<	33
Operations and systems researchers and analysts	3,330	0.7	5
Physical scientists	460	0.1	(nc)
Chemists	50	<	17
Environmental scientists and specialists, including health	30	<	17
Materials scientists	380	0.1	36
Social scientists	470	0.1	(nc)
Market research analysts	470	0.1	15
Engineers	55,580	12.3	(nc)
Aeronautical	34,840	7.7	7
Civil	160	<	16
Computer	430	0.1	34
Electrical/electronics	2,220	0.5	(nc)
Electrical	820	0.2	23
Electronics	1,400	0.3	21
Industrial	7,760	1.7	5
Mechanical	7,450	1.7	10
Sales	490	0.1	15

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Aircraft and parts (SIC 3720) -- continued:			
Other engineers	2,230	0.5	(nc)
Chemical	70	<	17
Environmental	190	<	8
Metallurgical/metallurgists	1,100	0.2	23
Safety	870	0.2	7
Technicians	23,200	5.1	(nc)
Computer, numerical tool, and process control programmers	3,920	0.9	(nc)
Computer programmers	2,470	0.6	8
Numerical tool and process control programmers	1,450	0.3	12
Drafters	2,200	0.5	(nc)
Electrical and electronics drafters	530	0.1	31
Mechanical drafters	1,670	0.4	20
Engineering technicians	16,090	3.6	(nc)
Aerospace engineering and operations technicians	5,640	1.3	9
Electrical/electronics engineering technicians	1,390	0.3	7
Electro-mechanical technicians	1,360	0.3	14
Environmental engineering technicians	50	<	24
Industrial engineering technicians	3,580	0.8	9
Mechanical engineering technicians	910	0.2	10
All other engineering technicians	3,160	0.7	(nc)
Broadcast technicians	60	<	50
Transportation inspectors	3,100	0.7	5
Physical and life science technicians	990	0.2	(nc)
Biological technicians	40	<	11
Chemical technicians, except health	750	0.2	11
Environmental science and protection technicians, including health	200	<	10
Ship and boat building and repairing (SIC 3730)			
Scientific and technical personnel.....	3,440	2.2	(nc)
Managers of scientific and technical personnel	1,030	0.7	(nc)
Computer and information systems managers	130	0.1	10
Engineering managers	900	0.6	7
Scientists	310	0.2	(nc)
Computer scientists	270	0.2	(nc)
Computer systems analysts	210	0.1	6
Network and computer systems administrators	60	<	11
Social scientists	40	<	(nc)
Market research analysts	40	<	20

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Ship and boat building and repairing (SIC 3730) -- continued:			
Engineers	1,540	1.0	(nc)
Electrical/electronics	230	0.2	(nc)
Electrical	230	0.2	11
Industrial	390	0.3	9
Sales	60	<	19
Other engineers	860	0.5	(nc)
Marine	620	0.4	9
Metallurgical/metallurgists	70	<	5
Safety	170	0.1	9
Technicians	560	0.4	(nc)
Computer, numerical tool, and process control programmers	160	0.1	(nc)
Computer programmers	80	0.1	20
Numerical tool and process control programmers	80	0.1	25
Engineering technicians	360	0.2	(nc)
Industrial engineering technicians	310	0.2	16
All other engineering technicians	50	<	(nc)
Transportation inspectors	50	<	29
Physical and life science technicians	40	<	(nc)
Environmental science and protection technicians, including health	40	<	20
Railroad equipment (SIC 3740)			
Scientific and technical personnel.....	2,000	7.2	(nc)
Managers of scientific and technical personnel	260	0.9	(nc)
Computer and information systems managers	50	0.2	8
Engineering managers	210	0.8	7
Scientists	50	0.2	(nc)
Computer scientists	50	0.2	(nc)
Computer systems analysts	50	0.2	5
Engineers	770	2.8	(nc)
Electrical/electronics	80	0.3	(nc)
Electrical	80	0.3	24
Industrial	470	1.7	3
Mechanical	220	0.8	7
Technicians	920	3.3	(nc)
Drafters	440	1.6	(nc)
Electrical and electronics drafters	30	0.1	24
Mechanical drafters	410	1.5	6
Engineering technicians	480	1.7	(nc)
Electronical/electronics engineering technicians	270	1.0	5
Industrial engineering technicians	60	0.2	9
Mechanical engineering technicians	150	0.5	12

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Motorcycles, bicycles, and parts (SIC 3750)			
Scientific and technical personnel.....	1,610	8.6	(nc)
Managers of scientific and technical personnel	140	0.8	(nc)
Computer and information systems managers	50	0.3	28
Engineering managers	90	0.5	19
Scientists	60	0.3	(nc)
Computer scientists	60	0.3	(nc)
Computer systems analysts	60	0.3	35
Engineers	1,220	6.5	(nc)
Industrial	120	0.6	22
Mechanical	1,010	5.4	33
Other engineers	90	0.5	(nc)
Metallurgical/metallurgists	90	0.5	40
Technicians	190	1.0	(nc)
Computer, numerical tool, and process control programmers	30	0.2	(nc)
Numerical tool and process control programmers	30	0.2	28
Drafters	50	0.3	(nc)
Mechanical drafters	50	0.3	19
Engineering technicians	110	0.6	(nc)
Mechanical engineering technicians	110	0.6	27
Guided missiles, space vehicles, parts (SIC 3760)			
Scientific and technical personnel.....	32,420	41.0	(nc)
Managers of scientific and technical personnel	2,350	3.0	(nc)
Computer and information systems managers	240	0.3	15
Engineering managers	2,110	2.7	14
Scientists	6,460	8.2	(nc)
Computer scientists	5,560	7.0	(nc)
Computer and information scientists, research	220	0.3	34
Computer software, applications	1,290	1.6	17
Computer software, systems	2,030	2.6	16
Computer systems analysts	1,380	1.8	18
Network and computer systems administrators	350	0.4	17
Network systems/data communications analysts	290	0.4	44
Mathematical scientists	690	0.9	(nc)
Operations and systems researchers and analysts	690	0.9	25
Physical scientists	160	0.2	(nc)
Chemists	60	0.1	39
Materials scientists	100	0.1	19
Social scientists	50	0.1	(nc)
Market research analysts	50	0.1	22

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Guided missiles, space vehicles, parts (SIC 3760) -- continued:			
Engineers	19,440	24.6	(nc)
Aeronautical	13,290	16.8	15
Computer	230	0.3	41
Electrical/electronics	1,350	1.7	(nc)
Electrical	560	0.7	30
Electronics	790	1.0	23
Industrial	2,800	3.5	30
Mechanical	1,450	1.8	17
Sales	40	0.1	20
Other engineers	280	0.4	(nc)
Chemical	110	0.1	40
Environmental	40	0.1	20
Safety	130	0.2	24
Technicians	4,170	5.3	(nc)
Computer, numerical tool, and process control programmers	670	0.9	(nc)
Computer programmers	670	0.9	20
Drafters	290	0.4	(nc)
Electrical and electronics drafters	100	0.1	24
Mechanical drafters	190	0.2	22
Engineering technicians	3,150	4.0	(nc)
Aerospace engineering and operations technicians	860	1.1	13
Electrical/electronics engineering technicians	1,080	1.4	22
Electro-mechanical technicians	420	0.5	24
Industrial engineering technicians	240	0.3	32
Mechanical engineering technicians	550	0.7	10
Physical and life science technicians	60	0.1	(nc)
Environmental science and protection technicians, including health	60	0.1	35
Miscellaneous transportation equipment (SIC 3790)			
Scientific and technical personnel	1,890	3.3	(nc)
Managers of scientific and technical personnel	250	0.4	(nc)
Computer and information systems managers	80	0.1	11
Engineering managers	170	0.3	8
Scientists	90	0.2	(nc)
Computer scientists	90	0.2	(nc)
Computer software, applications	40	0.1	22
Computer systems analysts	50	0.1	29
Engineers	850	1.5	(nc)
Electrical/electronics	100	0.2	(nc)
Electrical	100	0.2	15
Industrial	340	0.6	18
Mechanical	410	0.7	11

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Miscellaneous transportation equipment (SIC 3790) -- continued:			
Technicians	700	1.2	(nc)
Computer, numerical tool, and process control programmers	200	0.4	(nc)
Computer programmers	160	0.3	11
Numerical tool and process control programmers	40	0.1	19
Drafters	160	0.3	(nc)
Mechanical drafters	160	0.3	13
Engineering technicians	340	0.6	(nc)
Electrical/electronics engineering technicians	50	0.1	16
Industrial engineering technicians	160	0.3	26
Mechanical engineering technicians	130	0.2	19
Search and navigation equipment (SIC 3810)			
Scientific and technical personnel.....	62,720	40.8	(nc)
Managers of scientific and technical personnel	5,900	3.8	(nc)
Computer and information systems managers	1,280	0.8	13
Engineering managers	4,620	3.0	4
Scientists	12,960	8.4	(nc)
Computer scientists	12,290	8.0	(nc)
Computer and information scientists, research	150	0.1	41
Computer software, applications	3,870	2.5	11
Computer software, systems	6,310	4.1	8
Computer systems analysts	1,100	0.7	9
Network and computer systems administrators	530	0.3	9
Network systems/data communications analysts	330	0.2	12
Mathematical scientists	180	0.1	(nc)
Operations and systems researchers and analysts	180	0.1	19
Physical scientists	210	0.1	(nc)
Materials scientists	140	0.1	26
Physicists	70	0.1	42
Social scientists	280	0.2	(nc)
Market research analysts	280	0.2	28
Engineers	31,730	20.6	(nc)
Aeronautical	4,050	2.6	30
Civil	170	0.1	16
Computer	1,680	1.1	13
Electrical/electronics	16,900	11.0	(nc)
Electrical	8,360	5.4	13
Electronics	8,540	5.6	11
Industrial	3,510	2.3	5
Mechanical	4,260	2.8	9
Sales	330	0.2	6
Other engineers	830	0.5	(nc)
Chemical	190	0.1	30
Environmental	100	0.1	10
Metallurgical/metallurgists	390	0.3	13
Safety	150	0.1	11

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity	Relative standard error
Search and navigation equipment (SIC 3810) -- continued:			
Technicians	12,130	7.9	(nc)
Computer, numerical tool, and process control programmers	720	0.5	(nc)
Computer programmers	660	0.4	24
Numerical tool and process control programmers	60	<	20
Drafters	1,340	0.9	(nc)
Architectural and civil drafters	260	0.2	44
Electrical and electronics drafters	660	0.4	15
Mechanical drafters	420	0.3	11
Engineering technicians	9,990	6.5	(nc)
Aerospace engineering and operations technicians	1,430	0.9	15
Civil engineering technicians	30	<	40
Electrical/electronics engineering technicians	5,750	3.7	10
Electro-mechanical technicians	840	0.6	10
Environmental engineering technicians	80	0.1	18
Industrial engineering technicians	1,030	0.7	10
Mechanical engineering technicians	830	0.5	15
Physical and life science technicians	80	0.1	(nc)
Chemical technicians, except health	80	0.1	21
Measuring and controlling devices (SIC 3820)			
Scientific and technical personnel.....	71,460	25.3	(nc)
Managers of scientific and technical personnel	6,710	2.4	(nc)
Computer and information systems managers	1,410	0.5	7
Engineering managers	5,190	1.8	3
Natural sciences managers	110	<	44
Scientists	14,590	5.2	(nc)
Computer scientists	12,240	4.3	(nc)
Computer and information scientists, research	140	0.1	34
Computer software, applications	5,660	2.0	6
Computer software, systems	3,750	1.3	7
Computer systems analysts	1,420	0.5	10
Network and computer systems administrators	910	0.3	5
Network systems/data communications analysts	360	0.1	9
Life scientists	80	<	(nc)
Biochemists and biophysicists	40	<	27
Microbiologists	40	<	47
Mathematical scientists	230	0.1	(nc)
Operations and systems researchers and analysts	230	0.1	33
Physical scientists	1,060	0.4	(nc)
Chemists	900	0.3	12
Materials scientists	60	<	22
Physicists	100	<	19
Social scientists	980	0.4	(nc)
Market research analysts	980	0.4	12

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Measuring and controlling devices (SIC 3820) -- continued:			
Engineers	29,440	10.4	(nc)
Aeronautical	80	<	32
Civil	100	<	20
Computer	1,810	0.6	11
Electrical/electronics	12,510	4.4	(nc)
Electrical	8,130	2.9	11
Electronics	4,380	1.6	8
Industrial	4,200	1.5	8
Mechanical	6,550	2.3	6
Sales	3,110	1.1	6
Other engineers	1,080	0.4	(nc)
Biomedical	60	<	25
Chemical	250	0.1	16
Environmental	70	<	22
Metallurgical/metallurgists	490	0.2	12
Safety	210	0.1	22
Technicians	20,720	7.3	(nc)
Computer, numerical tool, and process control programmers	2,560	0.9	(nc)
Computer programmers	2,240	0.8	30
Numerical tool and process control programmers	320	0.1	15
Drafters	3,200	1.1	(nc)
Electrical and electronics drafters	1,550	0.6	6
Mechanical drafters	1,650	0.6	6
Engineering technicians	14,530	5.1	(nc)
Aerospace engineering and operations technicians	120	<	43
Civil engineering technicians	170	0.1	5
Electrical/electronics engineering technicians	8,020	2.8	4
Electro-mechanical technicians	2,120	0.8	9
Environmental engineering technicians	50	<	18
Industrial engineering technicians	2,200	0.8	16
Mechanical engineering technicians	1,850	0.7	9
Physical and life science technicians	430	0.2	(nc)
Chemical technicians, except health	430	0.2	11
Medical instruments and supplies (SIC 3840)			
Scientific and technical personnel	32,510	11.4	(nc)
Managers of scientific and technical personnel	3,750	1.3	(nc)
Computer and information systems managers	950	0.3	9
Engineering managers	2,600	0.9	4
Natural sciences managers	200	0.1	16

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Medical instruments and supplies (SIC 3840) -- continued:			
Scientists	6,670	2.3	(nc)
Computer scientists	4,040	1.4	(nc)
Computer and information scientists, research	70	<	18
Computer software, applications	1,380	0.5	10
Computer software, systems	660	0.2	9
Computer systems analysts	920	0.3	10
Network and computer systems administrators	710	0.3	6
Network systems/data communications analysts	300	0.1	10
Life scientists	310	0.1	(nc)
Biochemists and biophysicists	60	<	35
Medical scientists, except epidemiologists	140	0.1	21
Microbiologists	110	<	21
Mathematical scientists	150	0.1	(nc)
Operations and systems researchers and analysts	110	<	17
Statisticians	40	<	33
Physical scientists	1,230	0.4	(nc)
Chemists	1,140	0.4	20
Physicists	90	<	47
Social scientists	940	0.3	(nc)
Market research analysts	940	0.3	12
Engineers	12,900	4.5	(nc)
Computer	230	0.1	15
Electrical/electronics	2,580	0.9	(nc)
Electrical	1,750	0.6	10
Electronics	830	0.3	12
Industrial	3,470	1.2	8
Mechanical	3,650	1.3	8
Sales	470	0.2	23
Other engineers	2,500	0.9	(nc)
Biomedical	1,650	0.6	10
Chemical	140	0.1	24
Environmental	50	<	11
Metallurgical/metallurgists	530	0.2	8
Safety	130	0.1	8
Technicians	9,190	3.2	(nc)
Computer, numerical tool, and process control programmers	770	0.3	(nc)
Computer programmers	710	0.3	8
Numerical tool and process control programmers	60	<	16
Drafters	1,260	0.4	(nc)
Electrical and electronics drafters	230	0.1	15
Mechanical drafters	1,030	0.4	8

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Medical instruments and supplies (SIC 3840) -- continued:			
Engineering technicians	5,960	2.1	(nc)
Electrical/electronics engineering technicians	2,210	0.8	9
Electro-mechanical technicians	870	0.3	15
Industrial engineering technicians	1,610	0.6	8
Mechanical engineering technicians	1,270	0.4	11
Physical and life science technicians	1,200	0.4	(nc)
Biological technicians	180	0.1	14
Chemical technicians, except health	1,020	0.4	26
Ophthalmic goods (SIC 3850)			
Scientific and technical personnel.....	1,550	5.0	(nc)
Managers of scientific and technical personnel	230	0.7	(nc)
Computer and information systems managers	100	0.3	10
Engineering managers	130	0.4	21
Scientists	330	1.1	(nc)
Computer scientists	270	0.9	(nc)
Computer software, applications	40	0.1	18
Computer systems analysts	130	0.4	10
Network and computer systems administrators	60	0.2	15
Network systems/data communications analysts	40	0.1	21
Social scientists	60	0.2	(nc)
Market research analysts	60	0.2	24
Engineers	540	1.7	(nc)
Electrical/electronics	50	0.2	(nc)
Electrical	50	0.2	47
Industrial	360	1.2	12
Other engineers	130	0.4	(nc)
Metallurgical/metallurgists	130	0.4	21
Technicians	450	1.5	(nc)
Computer, numerical tool, and process control programmers	80	0.3	(nc)
Computer programmers	80	0.3	18
Engineering technicians	320	1.0	(nc)
Electrical/electronics engineering technicians	80	0.3	23
Industrial engineering technicians	240	0.8	8
Physical and life science technicians	50	0.2	(nc)
Chemical technicians, except health	50	0.2	12
Photographic equipment and supplies (SIC 3860)			
Scientific and technical personnel.....	9,810	15.4	(nc)
Managers of scientific and technical personnel	390	0.6	(nc)
Computer and information systems managers	220	0.3	39
Engineering managers	170	0.3	7

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Photographic equipment and supplies (SIC 3860) -- continued:			
Scientists	1,770	2.8	(nc)
Computer scientists	1,360	2.1	(nc)
Computer and information scientists, research	260	0.4	45
Computer software, applications	850	1.3	23
Computer software, systems	210	0.3	33
Network systems/data communications analysts	40	0.1	30
Physical scientists	410	0.7	(nc)
Chemists	330	0.5	14
Materials scientists	80	0.1	39
Engineers	6,330	9.9	(nc)
Computer	240	0.4	22
Electrical/electronics	720	1.1	(nc)
Electrical	220	0.3	15
Electronics	500	0.8	17
Industrial	1,510	2.4	40
Mechanical	1,160	1.8	20
Sales	100	0.2	18
Other engineers	2,600	4.1	(nc)
Environmental	2,400	3.8	22
Metallurgical/metallurgists	150	0.2	25
Safety	50	0.1	28
Technicians	1,320	2.1	(nc)
Computer, numerical tool, and process control programmers	180	0.3	(nc)
Computer programmers	180	0.3	8
Drafters	100	0.2	(nc)
Mechanical drafters	100	0.2	28
Engineering technicians	1,040	1.6	(nc)
Electrical/electronics engineering technicians	570	0.9	19
Industrial engineering technicians	470	0.7	18
Jewelry, silverware, and plated ware (SIC 3910)			
Scientific and technical personnel.....	450	1.0	(nc)
Managers of scientific and technical personnel	100	0.2	(nc)
Computer and information systems managers	100	0.2	6
Scientists	180	0.4	(nc)
Computer scientists	80	0.2	(nc)
Computer systems analysts	40	0.1	17
Network and computer systems administrators	40	0.1	12
Social scientists	100	0.2	(nc)
Market research analysts	100	0.2	26

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Jewelry, silverware, and plated ware (SIC 3910) -- continued:			
Engineers	50	0.1	(nc)
Industrial	50	0.1	13
Technicians	120	0.3	(nc)
Computer, numerical tool, and process control programmers	120	0.3	(nc)
Computer programmers	120	0.3	12
Musical instruments (SIC 3930)			
Scientific and technical personnel.....	380	2.5	(nc)
Managers of scientific and technical personnel	40	0.3	(nc)
Engineering managers	40	0.3	15
Scientists	40	0.3	(nc)
Computer scientists	40	0.3	(nc)
Computer software, systems	40	0.3	23
Engineers	210	1.4	(nc)
Electrical/electronics	120	0.8	(nc)
Electrical	40	0.3	22
Electronics	80	0.5	18
Industrial	50	0.3	15
Mechanical	40	0.3	16
Technicians	90	0.6	(nc)
Computer, numerical tool, and process control programmers	50	0.3	(nc)
Computer programmers	50	0.3	16
Engineering technicians	40	0.3	(nc)
Electrical/electronics engineering technicians	40	0.3	18
Toys and sporting goods (SIC 3940)			
Scientific and technical personnel.....	3,270	3.6	(nc)
Managers of scientific and technical personnel	570	0.6	(nc)
Computer and information systems managers	240	0.3	8
Engineering managers	330	0.4	8
Scientists	860	1.0	(nc)
Computer scientists	640	0.7	(nc)
Computer software, applications	70	0.1	19
Computer software, systems	60	0.1	15
Computer systems analysts	290	0.3	12
Network and computer systems administrators	140	0.2	11
Network systems/data communications analysts	80	0.1	16
Physical scientists	60	0.1	(nc)
Chemists	60	0.1	20
Social scientists	160	0.2	(nc)
Market research analysts	160	0.2	13

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Toys and sporting goods (SIC 3940) -- continued:			
Engineers	1,020	1.1	(nc)
Electrical/electronics	60	0.1	(nc)
Electrical	60	0.1	16
Industrial	380	0.4	7
Mechanical	460	0.5	10
Other engineers	120	0.1	(nc)
Metallurgical/metallurgists	90	0.1	18
Safety	30	<	17
Technicians	820	0.9	(nc)
Computer, numerical tool, and process control programmers	160	0.2	(nc)
Computer programmers	160	0.2	9
Drafters	270	0.3	(nc)
Mechanical drafters	270	0.3	11
Engineering technicians	390	0.4	(nc)
Electrical/electronics engineering technicians	70	0.1	20
Electro-mechanical technicians	80	0.1	20
Industrial engineering technicians	90	0.1	11
Mechanical engineering technicians	150	0.2	12
Pens, pencils, office, & art supplies (SIC 3950)			
Scientific and technical personnel	750	2.8	(nc)
Managers of scientific and technical personnel	200	0.7	(nc)
Computer and information systems managers	90	0.3	12
Engineering managers	110	0.4	12
Scientists	180	0.7	(nc)
Computer scientists	100	0.4	(nc)
Computer software, applications	30	0.1	30
Computer systems analysts	30	0.1	20
Network and computer systems administrators	40	0.2	12
Physical scientists	50	0.2	(nc)
Chemists	50	0.2	6
Social scientists	30	0.1	(nc)
Market research analysts	30	0.1	21
Engineers	190	0.7	(nc)
Industrial	70	0.3	18
Mechanical	120	0.4	18
Technicians	180	0.7	(nc)
Computer, numerical tool, and process control programmers	60	0.2	(nc)
Computer programmers	60	0.2	14
Drafters	90	0.3	(nc)
Mechanical drafters	90	0.3	30
Engineering technicians	30	0.1	(nc)
Mechanical engineering technicians	30	0.1	20

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Costume jewelry and notions (SIC 3960)			
Scientific and technical personnel.....	120	0.7	(nc)
Managers of scientific and technical personnel	40	0.2	(nc)
Computer and information systems managers	40	0.2	14
Engineers	40	0.2	(nc)
Mechanical	40	0.2	9
Technicians	40	0.2	(nc)
Computer, numerical tool, and process control programmers	40	0.2	(nc)
Computer programmers	40	0.2	24
Miscellaneous manufactures (SIC 3990)			
Scientific and technical personnel.....	5,270	3.1	(nc)
Managers of scientific and technical personnel	700	0.4	(nc)
Computer and information systems managers	280	0.2	7
Engineering managers	420	0.3	7
Scientists	1,270	0.8	(nc)
Computer scientists	1,060	0.6	(nc)
Computer software, applications	370	0.2	14
Computer software, systems	200	0.1	20
Computer systems analysts	230	0.1	6
Network and computer systems administrators	190	0.1	6
Network systems/data communications analysts	70	<	13
Physical scientists	70	<	(nc)
Chemists	70	<	5
Social scientists	140	0.1	(nc)
Market research analysts	140	0.1	6
Engineers	1,540	0.9	(nc)
Civil	30	<	9
Computer	40	<	31
Electrical/electronics	490	0.3	(nc)
Electrical	220	0.1	13
Electronics	270	0.2	24
Industrial	280	0.2	6
Mechanical	420	0.3	10
Sales	100	0.1	11
Other engineers	180	0.1	(nc)
Chemical	60	<	2
Metallurgical/metallurgists	90	0.1	11
Safety	30	<	8

See explanatory information and SOURCE at end of table.

Table 7. Employed scientists, engineers, technicians (SETs), and SET managers
in SICs 33-39 (selected manufacturing industries, continued),
and the relative standard error: 2001
[Filled positions]

Industry and SET occupation	Filled positions	SET intensity ¹	Relative standard error ²
Miscellaneous manufactures (SIC 3990) -- continued:			
Technicians	1,760	1.1	(nc)
Computer, numerical tool, and process control programmers	320	0.2	(nc)
Computer programmers	210	0.1	10
Numerical tool and process control programmers	110	0.1	27
Drafters	710	0.4	(nc)
Electrical and electronics drafters	260	0.2	23
Mechanical drafters	450	0.3	8
Engineering technicians	650	0.4	(nc)
Electrical/electronics engineering technicians	310	0.2	14
Electro-mechanical technicians	80	0.1	24
Industrial engineering technicians	150	0.1	12
Mechanical engineering technicians	110	0.1	18
Physical and life science technicians	80	0.1	(nc)
Chemical technicians, except health	80	0.1	12

¹SET intensity = the ratio of SET employment (including SET managers) in a given SIC to total employment in that SIC, expressed in percentage terms.

²Relative standard error of the estimate of filled positions, expressed as a percentage.

KEY: nc = Not computed
 < = The estimated actual value is less than 0.05 for percentages when used
 to characterize SET intensity.
 n.e.c. = Not elsewhere classified.
 SIC = Standard Industrial Classification. See Technical Notes for explanation.

NOTE: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/Bureau of Labor Statistics, Occupational Employment Statistics Survey.